

# Notice of Allowability

Application No.

09/944,099

Examiner

Tai Duong

Applicant(s)

CHOI ET AL.

Art Unit

2871

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Election 07/02/04.
2. ☒ The allowed claim(s) is/are 1.
3. ☒ The drawings filed on 04 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **EXAMINER'S AMENDMENT**

This application is in condition for allowance except for the presence of claims 4 and 5 to species non-elected without traverse. Accordingly, claims 4 and 5 been cancelled.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In the claims

Claims 4 and 5 have been canceled.

### Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

None of the prior art of record, especially Hara et al, discloses or suggests a liquid crystal display wherein a smectic liquid crystal has spontaneous polarization in a range of approximately  $2 \text{ nC/cm}^2$  to  $10 \text{ nC/cm}^2$  and a unit storage capacitance is in a range of approximately  $1 \text{ nF/cm}^2$  to  $4.5 \text{ nF/cm}^2$  for optimizing transmittance depending on the spontaneous polarization of the smectic liquid crystal.

Hara et al disclose a smectic liquid crystal having a spontaneous polarization less than  $10 \text{ nC/cm}^2$  and a storage capacitance of 0.5 pF (embodiments 7-12). However, Hara et al are silent about *the unit storage capacitance being in a range of approximately  $1 \text{ nF/cm}^2$  to  $4.5 \text{ nF/cm}^2$  for optimizing transmittance depending on the spontaneous polarization of the smectic liquid crystal.*

Sato et al disclose a smectic liquid crystal having a spontaneous polarization less than  $10 \text{ nC/cm}^2$  and a ceramic capacitor of 2 nF. However, Sato et al are silent about *the unit storage capacitance being in a range of approximately  $1 \text{ nF/cm}^2$  to  $4.5 \text{ nF/cm}^2$  for optimizing transmittance depending on the spontaneous polarization of the smectic liquid crystal.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

TD

TVD

08/04

  
TOANTON  
PRIMARY EXAMINER